# Water Supply, Sanitation and Hygiene in Nampula Province (NAMWASH), Mozambique INK348

## **EVALUATION REPORT**

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#### **Activity Summary**

Activity Name	Water Supply, Sanitation and Hygiene in Nampula Province (NAMWASH), Mozambique (Phase 1)			
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#### Disclaimer:

This report reflects the views of the Evaluation team, rather than those of the Government of Australia or of the Government of Mozambique.

#### UNCLASSIFIED

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## **Executive Summary**

NAMWASH was designed as a 5 year programme in two phases, which aims to improve water and sanitation in 5 small towns in Nampula Province. AusAid funds UNICEF Mozambique to implement the programme. AusAid, UNICEF, the Government of Mozambique and local Mozambican communities all contribute financially to NAMWASH which is being delivered in 5 towns along the Nacala Corridor, Ribaue, Rapale, Monapo, Namialo and Mecuburi. The towns were selected on the basis of need (WASH coverage rates, health statistics, poverty, anticipated economic and population growth, service delivery capacity and investment gaps). Implementation began in January 2012 and involved two key components:

- A technical component, whose objective is to increase access to safe water, effective sanitation services and improve hygiene knowledge and practices. The main activities are improvement of school water supply and sanitation, improvements to public and household sanitation infrastructure and behaviour, development of sanitation master plans and physical improvements to the piped water supplies.
- An institutional component whose primary objective is to increase and sustain access to water supply, sanitation and hygiene through improved management of systems at local government level. This includes the extension of Mozambique's Delegated Management Framework from cities to towns as well as the development of opportunities for local entrepreneurs. A further objective is to strengthen sector capacity at all levels of government to manage sector funds focused on small piped water supplies and sanitation as well as to plan, coordinate, implement, supervise sector activities, document and disseminate lessons learned and good practices.

This evaluation has been undertaken 16 months into Phase 1, primarily to inform the design of Phase 2 since it is too early to be able to make a rigorous assessment of the impacts from activities to date. The evaluation will also help management to assess progress against Phase 1 target results and objectives and assess the suitability of the approach taken. This is important since, for exceptional reasons, the design of Phase 1 was not tested by the AusAID's normal quality processes. The evaluation will thus help to ensure that AusAID's Quality Assurance standards will be met in Phase 2. The evaluation further aims to obtain wider learning on aid effectiveness from the challenges that NAMWASH is addressing in the nascent environment of town service delivery and inform its main users, AusAID, GoM and UNICEF and contribute to the effectiveness of their programmes.

In the absence of a structured framework to monitor Phase 1, the evaluation team developed a logic model to be used as the analytical framework against which to assess the relative success of the NAMWASH programme interventions. A separate effort to track and measure the impact of NAMWASH is currently being undertaken by Murdoch University. Because of the early stage at which the evaluation was conducted and in the absence of key monitoring data, some key evaluation questions relating to impact cannot be directly verified. In these cases, the evaluation team used a "contribution analysis" approach which seeks to confirm the reasonableness of the assumptions underlying the NAMWASH design. The evaluation team followed a structured programme during May 2013, involving: Planning, Document review, Consultations with key stakeholders, Site visits and observations, and Analysis and reporting.

#### **Initial Findings and Recommendations**

Most Phase 1 activity has related to delivering against the technical component although the involvement of local and provincial government officials at this stage will provide a foundation for future institutional development. On specific deliverables, the findings are as follows:

Work to rehabilitate and expand the Ribaue water supply system has started but it is already acknowledged that the target (PAF 1-1) of meeting the needs of 12 000 people with safe drinking will not be reached. Only 8000 people will be reached following scope reductions due to cost increases. However, some communities have benefitted from the provision of water to schools (PAF 1-4). At the time of visit, no operator had been identified for the system. For Phase 2, opportunities have been identified to take over and rehabilitate old railway water systems to improve supplies to areas close to the urbanising cores of Ribaue (bairro Namiconha) and Namialo as well as other towns.

The team was unable to verify the progress reported to meet the target (PAF 1-2) of 10,000 people with safe sanitation, specifically 'improved' latrines using components produced by local artisans, supported by the

Programme. Various sources cite cost as a barrier to adoption and a local artisan in Ribaue reported that he had not sold any improved latrine slabs in Ribaue this year although he had "exported" a substantial number to an organisation in Cuamba. Slabs used for household sanitation improvement in Ribaue were left over from an earlier Red Cross intervention; in Rapale they came from an MCA intervention. The relatively high proportion of households that already had a "traditional" latrine, often well-built and in good condition, raised doubts about the demand for and feasibility of upgrading with "improved" components.

There was evidence of substantial activity to implement the goal **(PAF 1-3)** of promoting improved hygiene practices amongst 10,000 people in 5 small towns. However, it was not possible to verify what progress has occurred as a result. This is due in part to the relatively short period of time that has elapsed since the activity began but is also due to the fact that monitoring information is collected by the service provider, who cannot be fully objective. It was also noted that PEC approaches might in some cases be inappropriate to the audience – e.g. promoting improved latrines, by explaining their benefits, to people who already had well-built traditional units.

Significant progress was verified towards the achievement of the goal (**PAF 1-4**) of providing 20,000 school children with access to safe sanitation. It was noted that in some cases, school latrines had previously been provided; however even in those cases it was not clear that the number of "seats" provided is adequate for the number of students and all were below the UNICEF guideline of 25 children / toilet. But some toilets built before NAMWASH appeared to be little used, highlighting the importance of monitoring actual use after construction.

The most visible progress that has been made is towards meeting the goal (**PAF 1-4**) of ensuring that 7,000 school children have access to safe drinking water. A number of schools were visited with working handpumps on boreholes constructed by the programme. Water committees at these schools were active in monitoring and management and, in a number of cases, could demonstrate that they had successfully dealt with problems that had emerged. In many cases, the surrounding community was using the pumps, providing an incentive for their participation in management committees. This complementary benefit has not been adequately captured or considered in programme design. In many cases, pumps were installed in predominantly rural communities, suggesting that the programme's focus on supporting urbanisation had not guided site selection.

Completion of the **Baseline (PAF 1-5 & 6)** was verified. However, the Baseline has not met all the purposes that it was intended to serve. While the data collection and household selection methods used were sound, the sample size only allows assessment of the overall programme, not of each town. This reduced the value of the Baseline for master planning purposes. While the Baseline was produced after the programme had started, some evidence was presented that it is now informing programme design although there was no clear evidence that findings of the institutional assessment have been integrated into design.

Sanitation master plans for three towns were reviewed in final draft form. These should provide guidance for future interventions to improve sanitation. The master plans are still to be initiated for the final two towns and will be completed too late to provide specific information for Phase 2 of the Programme although the general approach will be useful. Because of their focus on sanitation, the plans do not adequately address water supply issues and further work may be needed to produce an overall WASH master plan. There was also little coordination with a parallel process to produce spatial development plans for some of the towns. However, the linkage between sanitation and future urbanisation is addressed, with land identified to be reserved for wastewater collection and treatment infrastructure. Various opportunities for small private enterprises are also identified although there is only limited analysis of the commercial potential of such activities.

#### A number of other general issues were identified and addressed.

Relevance: The stated intention of the programme to support emerging urban areas to manage future economic and population growth was not effectively reflected in programme activities and was not recognised as a guiding principle by either UNICEF or by local government partners, who explicitly sought to distribute Programme resources equitably across both urban and rural areas in their jurisdictions.

**Environment:** In general, the programme's sanitation activities should benefit the local environment and no unintended environmental impacts were noted, although high density urban development using on-site sanitation will increase nitrate levels in groundwater and increase risks of local bacteriological contamination. It was reported but not verified that an EIA has been completed for the Ribaue water project where there is a risk of transitory downstream impacts from the desilting of the reservoir.

**Disability:** Limited consultation with national or local representative organisations working with disability was included in Programme reporting. The Provincial agency of the organization responsible for these issues (INAS) was not aware of the Programme but has offered its support.

**Gender:** Facilities are being built for women and disabled people specifically where deemed relevant – but some flaws in demand assessments were identified. Hospital plans for sanitation facilities did not include adequate provision for women, based on proportion of female patients in Rapale; there was limited evidence of female involvement in teams hired for delivery or supply chain aside from the PEC teams; and while there was a significant number of women members in local water committees, the leadership of those met was almost exclusively male. INAS (see above) has offered to provide guidance and support to help achieve full and active participation of women in institutional activities, down to local water committee level.

**Sustainability:** Evidence suggests that sustainability considerations are being built into key supply side aspects of the programme (provision of water and sanitation facilities). For example the master-plans have provide a framework for continued sanitation development and local water management committees have been established to help maintain the school water pumps. Concerns exist over demand side issues since the impact of the affordability of water and real (as opposed to imputed) demand for sanitation generated through PEC have yet to be tested in the take up of improved sanitation and water supply at household levels.

**Small business development and procurement:** There was evidence that work has been initiated on the identification of potential operators for the Ribaue water system, which is now under construction as well as with small businesses and NGOs that are engaged in various relevant activities. It was noted that the development of public sanitation facilities had been delayed in a number of locations visited as a result of contractual arrangements that were unfriendly for local entrepreneurs and that the approach to incentivising well drillers might lead to sub-optimal development outcomes.

**Organisational issues:** Evidence from the evaluation review of documentation and stakeholder consultations highlighted that there was good coordination between partners at local and provincial levels prior to NAMWASH and that the NAMWASH programme is also coordinating well at local levels although health and social action institutions had not been adequately integrated. Coordination could be improved at national levels both between the three lead Programme partners as well as with other sector donors.

**Programme Management and Monitoring:** Monitoring information about progress of components of NAMWASH which are led from Maputo were verified. These include the Baseline and master plans. The quality of monitoring information for operational work undertaken in Nampula is more variable. For example PEC monitoring of impact is undertaken by the delivery team without any consistent verification. Furthermore at a local and provincial level no evidence of robust monitoring systems was found, progress updates appear to be ad hoc, unverified and undertaken mainly to meet AusAid 6 monthly reporting periods although progress updates, when undertaken, are communicated to all relevant stakeholders. Risk management does not appear to be systematically undertaken and aligned to project management practices.

**Value for Money:** In reviewing the programme inputs the evaluation team found that the original budget assessment processes had been weak. As a result this led to a number of incorrect assumptions being made about the costs for various aspects of the programme. In particular the GoM contribution had been misinterpreted by the UNICEF team in compiling the original budget and is now less than originally understood.

The procurement processes followed by the UNICEF team are thorough and in line with GoM good practice. For technical consultancy support and small construction works, the time and effort required to procure relatively small services appears to be disproportionate.

Programme Governance and Accountability: It was evident that the overall governance of the Programme has been constrained by the absence of an AusAID presence in Mozambique and by the fact that the AusAID management team does not speak Portuguese. As a result, the management team have limited access to Programme participants and documentation and rely heavily on UNICEF, as their Implementing Partner. The interaction with AIAS, as the lead GoM agency, is weakened as a result of this arrangement. A consequence is that lines of accountability are strongest from UNICEF to AusAID and much weaker from

UNICEF to AIAS and from AIAS to AusAID. Since AIAS must formally represent the interests of the eventual beneficiaries, this structure weakens the ability of Mozambican beneficiaries, at all levels, to hold UNICEF or AusAID accountable for interventions (and vice versa).

## **Summary of recommendations**

The evaluation team reviewed and analysed the evidence presented over the course of the evaluation period in order to provide the recommendations which are noted in summary form below. Full recommendations are included in the conclusions chapter to this report. It is recommended by the evaluation team that:-

- 1. The balance between programme objectives and community demand be reviewed to guide both the allocation of financial resources and the balance between activities that focus on water supply and those that address sanitation during the second phase.
- 2. The programme should review its approach to, and targeting of, improved household sanitation to ensure clarity about the objectives, and then develop appropriate strategy and instruments to support it.
- 3. The programme make better use of existing and specifically commissioned research and plans in order to guide delivery of the programme.
- 4. Future master planning should address both water supply and sanitation, since water availability determines sanitation choices, and linkages should be made with town structure planning processes wherever possible.
- 5. The delivery team seek further advice at a provincial, national and international level in order to improve the programme's performance in relation to the inclusion criteria. There should be formal consultation and engagement with representatives of provincial and local gender and disability organisations.
- 6. Coordination should be improved between the NAMWASH team and other government departments: including the department of Health, Education and the relevant department responsible for the Nacala corridor (Department of Finance and Development).
- 7. Amendments should be considered to procurement and payment arrangements to make them more tolerant to the way small suppliers operate.
- 8. The delivery partner should improve its current monitoring and evaluation plans and processes.
- 9. The accountability of AIAS for Programme outcomes should be strengthened through the development of an explicit agreement about roles and responsibilities between AIAS and AusAID. This should include clear guidance on the relationship between AIAS and UNICEF that reflects AIAS' presence on the ground and accountability to its wider national constituency.
- 10. The project management and budget development and review process for the NAMWASH programme should be strengthened.

# **Evaluation Criteria Ratings**

Evaluation Criteria <sup>1</sup>	Rating (1-6)	Explanation
Relevance	4	While the conceptual focus is excellent, its implementation was patchy, in part because implementing partner had not bought into key elements, notably the focus on urbanisation and the importance of supporting behaviour change through complementary infrastructure provision.
Effectiveness	4	While good progress had been made on all components, the quality was not always up to desired standards.
Efficiency	4	Procurement approaches appeared to be achieving value for money. Contractual and payment arrangements need updated to be more appropriate for small entrepreneurs. Budgeting has been weak, assumed contributions from the government of Mozambique were incorrect; cost per output is likely to increase in a number of cases as a result of changes in costs relating to staff time and number of beneficiaries which will be reached.
Sustainability	4	Although it was too early to make firm judgements, key sustainability requirements had been identified; the implementation of measures was still emerging with some weaknesses evident.
Gender equality	4	Main building blocks were in place, but gender and disability aspects not always followed through adequately.

## Rating scale

Satisfactory Less than satisfactory		ss than satisfactory	
6	Very high quality	3 Less than adequate quality	
5	Good quality	2 Poor quality	
4	Adequate quality	1 Very poor quality	

<sup>&</sup>lt;sup>1</sup> If impact is included, a rating is not expected to be applied.

## Introduction

## **Initiative Background**

NAMWASH was designed as a 5 year programme in two phases, which aims to improve water and sanitation in 5 small towns in Nampula Province. This programme follows on from earlier AusAid support to the World Bank's WASIS program. The rationale behind AusAid's intervention centres on:

- A need to support the Government of Mozambique's process of sector reform and decentralisation in secondary cities and towns.
- To address the immediate **impacts from rapid urbanisation and economic growth**, especially from mining and related development
- Addressing the fact that Mozambique scores poorly on the Human Development Index and its sustained economic growth has not been matched by a corresponding reduction in poverty or a significant improvement in equity, including for basic services
- Government's approach to sanitation policy setting and implementation, which is fragmented, with legal frameworks and cultural issues acting as barriers, despite a significant political desire to achieve better results.

Strategically, NAMWASH is aligned to the priorities identified in AusAID's draft sector Delivery Strategy, Sustainable Water and Sanitation Services for Africa 2012-2016 (SWaSSA) and in particular the following:

- Increased access to safe water, effective sanitation services and improved hygiene knowledge and practices in selected secondary cities, peri-urban areas, towns and market centres.
- Improved service delivery sustainability in the WASH sector in selected secondary cities, peri-urban areas, towns and market centres.

SWaSSA also aims to address critical pressures on WASH service delivery resulting from urbanisation, population growth and mining driven economic growth.

There will be a mid-term review of the overall SWaSSA programme between January and June 2014 in order to allow AusAid to better articulate their thinking and indicators for exiting their current crop of countries (as necessary) and to lay the foundations for post-SWaSSA sector engagement. It is likely that decisions on additional future assistance to Malawi and Mozambique will take place during the delivery period for SWaSSA and NAMWASH as a result.

AusAid funds UNICEF Mozambique to implement the program. AusAid, UNICEF, the Government of Mozambique and local Mozambican communities all contribute financially to NAMWASH. The program is being delivered in 5 towns along the Nacala Corridor which were selected on the basis of four criteria (location on the corridor; town part of AIAS mandate; no significant alternative sources of investment; and low coverage of water supply and sanitation). The five towns are: Ribaue, Rapale, Monapo, Namialo and Mecuburi. Delivery commenced in January 2012 and involves two key components:

**Technical component:** The objective of the technical component is to increase access to safe water, effective sanitation services and improve hygiene knowledge and practices in selected secondary cities, periurban areas, towns and market centres. The main activities include:

- School WASH: in practice this involves construction or improvement of water supply facilities and sanitation and hygiene complexes (latrines, urinals, and hand washing facilities) and hygiene promotion activities using approaches such as School Health Clubs. It involves improving school WASH infrastructure and developing hygiene education materials
- Actions to improve sanitation infrastructure and behaviours in small towns: in practice this involves outreach visits to individual homes, schools, health centres and other locations to spread hygiene

messages. It will also involve providing support in collection, transport and end-disposal as well as in the production of latrine components. Small-scale service providers will be equipped with manual evacuation units, and trained to provide services on a for-profit basis.

- Development of sanitation master plans: This includes a mapping of existing sanitation infrastructure and
  proposals for its expansion, considering population density, local development plans for urban expansion
  and zoning, access and viability, willingness to pay for sanitation, private sector actors and municipal
  and local level capacity assessment.
- Physical improvements to the piped water supply: in practice this will involve the rehabilitation or construction of the water source and pumping station, existing piped water supply, including treatment plants where applicable, the extension of the water supply network, promotion for household water supply connections and construction of water supply stand posts.

**Institutional component:** the primary objective of the institutional component is to increase access to water supply, sanitation and hygiene by the targeted population, through improved management of systems at local government level as well as, more generally, of sector funds and programme activities focused on small piped water supplies and sanitation. Strengthened sector capacities at Provincial level to plan, coordinate, implement, supervise sector activities, document and disseminate sector lessons learned and good practices. The main activities include:

- Capacity building: this will be undertaken with a range of stakeholders including provincial stakeholders (AIAS delegation/DPOPH) and local government staff, private sector (operators, supervising engineers) and NGOs. Specific areas of capacity development will include:
  - Provincial (AIAS delegation/DPOPH) and District/Municipal staff Procurement procedures (Decree Law 15/2010), tariff setting, contract and financial management, sanitation technology and sustainability promotion and implementation,
  - ➤ Private Sector (operators/supervising engineers) Financial management, tariff setting, revenue collection and management, operation and maintenance, reinvestment planning,
  - ➤ NGOs sanitation promotion, school water and sanitation promotion, hygiene promotion, Menstrual Hygiene Management, gender and disability enabled design.

During phase 1 most activity has related to delivering against the technical component although the involvement of local and provincial government officials at this stage is critical to provide a foundation for future institutional development.

## **Evaluation Purpose and Questions**

The purpose of the evaluation was two-fold. Firstly for management purposes: to assess progress against Phase 1 target results and objectives and assess the suitability of the approach taken during Phase 1 to inform potential changes to the design of Phase 2. Given that the design of Phase 1 was not tested by the AusAID's normal quality processes (for exceptional reasons), the evaluation is important to ensure that AusAID's Quality Assurance standards will be met in Phase 2. Secondly, the evaluation aimed to obtain wider learning on aid effectiveness that will result from the challenges that NAMWASH is trying to address in the nascent environment of service delivery in towns. The evaluation will be also a useful source of information on the effectiveness of the aid program to its main users, AusAID, GoM and UNICEF, who have several accountabilities.

According to the original Terms of Reference, there were three high-level evaluation questions and then a series of sub questions which were to be addressed through this evaluation. Each of the high level questions is discussed briefly below in more detail. This is subsequently followed with a detailed evaluation research framework.

KEQ1: What has been NAMWASH's progress against its Phase 1 target outcomes and what has influenced progress?

Phase 1 lasts 2 years and the evaluation is taking place 1.5 years into delivery. The programme logframe covers the entire 5 year duration of the programme however specific outcomes have been set for Phase 1. Responding to this evaluation question includes reflections on whether the targets for Phase 1 were realistic and appropriate and what the progress during Phase 1 tells us about likely progress during phase 2.

KEQ2: Based on experience and lessons to date, what changes to the NAMWASH design and implementation for Phase 2 could be made to ensure that it has the best possible chance to: achieve outcomes that meet Government priorities; and progress through AusAID's quality processes with minimal changes?

This question reflects the majority of the evaluator's assessment and covers the following key aspects:

- Relevance: to what extent does the programme fit with GoM and AusAid strategies & policies?;
- Evidence based: to what extent was targeting of the intervention evidence-based and appropriate?;
- Effective: to what extent has the implementation approach been optimal to achieving government ownership of capacity building / institutional strengthening, how well have governance and management processes been established and implemented (including Risk assessment and management and Monitoring & Evaluation), to what extent UNICEF engaged in meaningful partnerships and policy dialogue with GoM and LAs;
- **Efficient:** to what extent has value for money been achieved through the implementation of the programme (economy, efficiency, effectiveness<sup>2</sup> and equity)?;
- Sustainability and Impact: to what extent has NAMWASH delivered behaviour change in the targeted
  areas and a government / institutional levels (in particular in relation to the development of effective
  management arrangements and the introduction of, and support for, the Delegated Management
  Framework by LAs) to achieve sustainability in this area; to what extent is the current delivery model
  optimal for achieving the desired impact; and
- **Inclusion:** to what extent has participation of women and people with a disability been considered in the implementation of the programme to date, and to what extent is NAMWASH meeting AusAid's safeguard obligations especially working through partner government systems and environmental safeguards.

KEQ3: How has NAMWASH contributed to improving sector coordination and how can this be improved for the Phase 2 design?

To what extent were actions of stakeholders operating in the sector at Government, regulatory, private sector and community levels coordinated prior to NAMWASH investment and how has this changed over the last 18 months. What actions of the NAMWASH programme have focused on improved communication, comanagement and co-ordination, alignment of visions and objectives for these stakeholders? What benefits have any changes to these aspects created and how could this be improved during Phase 2.

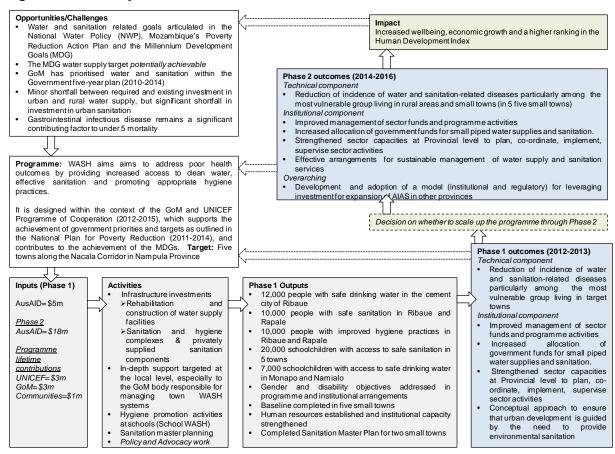
## **Evaluation Scope and Methods**

An evaluation research framework was developed to outline the specific evaluation questions in further detail so that all parties were clear about the focus on the study. This is detailed in Annex B and formed the basis for the design of stakeholder topic guides and other research tools used during the evaluation. The evaluation team used a programme theory evaluation approach which involves the development of a logic model to form the analytical framework against which to assess the relative success of the NAMWASH programme interventions. A separate piece of work to longitudinally track and measure the impact of NAMWASH is currently being undertaken by Murdoch University on behalf of UNICEF. As a result the

<sup>&</sup>lt;sup>2</sup> Cost effectiveness is normally considered as a key component of Value for Money. In the case of the NAMWASH programme it is not realistic to consider this assessment in full given the point at which the evaluation is taking place 18 months into delivery. Therefore the evaluation will seek to review indications of the extent to which the intervention is cost effective rather than undertake a full cost effectiveness assessment at this early stage.

responses to some key evaluation questions relating to impact cannot be scientifically verifiable. For this reason, the evaluation team used a contribution analysis approach which seeks to confirm the reasonableness of the assumptions underlying the NAMWASH design with its focus on changing behaviours at both community and institutional levels in the target towns. Figure 1 below outlines the analytical framework for the programme.

Figure 1: Draft analytical framework - NAMWASH



Source: Independent evaluation team: Kelly Beaver & Mike Muller

The evaluation methods consisted of a desk based review, and a field visit which took place from 7<sup>th</sup> May – 15<sup>th</sup> May. During the field visit the evaluation team visited 4 of the towns supported under NAMWASH during Phase 1 and spoke to relevant stakeholders at Provincial and local levels.

**Evaluation Phase 1: Inception and familiarisation:** Prior to conducting the field visit the evaluation team conducted a desk based review of existing documentation on the programme. This included the programme design proposal, UNICEF progress, Baseline report, and The Murdoch Report which reviewed the quality of the baseline work. In addition the evaluation team were briefed on the mission by the AusAid staff and used this to design the evaluation research framework and theory of change. The output from this stage was an evaluation plan and topic guides for use during the field visit.

**Evaluation Phase 2: Study visit:** During the study visit a range of stakeholders were consulted. This included Provincial and District level representatives from CRA, AIAS, DPOPH, DNA, and the Dutch Embassy as well as local stakeholders in 4 towns (Rapale, Ribaue, Namialo and Monapo) including: beneficiaries, the District Administrator, Mayor, members of the Sanitation working groups, WASH technicians, and PEC team members by way of example. The sites were the programme has been implemented were visited and improvement water and sanitation services were inspected.

**Evaluation Phase 3: Analysis and reporting:** During the final days of the visit the evaluation team worked to triangulate the evidence collected against the analytical framework and key evaluation criteria in order to make an independent assessment of the programme's performance to date. This output from this analysis was presented to local stakeholders in Nampula and then again to UNICEF and AIAS in Maputo. Following

these presentations the evaluation team drafted an Aide Memoire which summarised the findings of the evaluation and presented this to AusAid in Pretoria. This draft evaluation report represents the next output from the evaluation and will be updated following feedback from AusAid. More details on exactly who was consulted during the evaluation study visit can be found in Annex D. The visit schedule is included in Annex F.

As with all evaluations there are a number of limitations to the methodology which impact on the way in which the evidence presented should be interpreted:

- Evaluation undertaken during early stages of the programme delivery: The evaluation was
  undertaken 18 months into the programme's delivery. As a result a number of the outputs were in
  progress and during the town visits evidence of progress was sought. The timing of the evaluation
  limited the extent to which evidence of significant beneficiary level impact was available. This has been
  considered in the assessment of programme impact to date.
- Limited timeframes for the review in-country: the review time in-country was limited to 1.5 weeks. To maximise the value of the in-country time the evaluation team sought to undertake a review of all available documentation in advance of the visit, and to develop the draft final report following the visit. This allowed for the time in country to be spent on verifying outputs to date and consultations with stakeholders. The evaluation team did not however have time to fully investigate the monitoring systems in place in AIAS or UNICEF in further detail during the visit and this has limited this assessment.
- Baseline created after project initiation: Evidence relating to the status of the interventions areas prior to NAMWASH initiation is not available, however the baseline information which have been generated is useful to some extent. This is discussed in more detail subsequently.
- **Team composition:** The evaluation team was joined on the town visits by a range of stakeholders with vested interests in the delivery of the programme and the outcome from the evaluation. This included UNICEF, AIAS and AusAid. In order to minimise the influence that this involvement had on the quality of stakeholder consultations and the independence of the evaluation overall the evaluation team took the main lead during visits to towns and consultations with stakeholders, and independently undertook the analysis and write up of the evaluation findings.

## **Evaluation Findings**

#### Relevance

Rating: 4

The NAMWASH Programme design generally meets the policy and high level goals of GoM, AusAID and UNICEF. Specifically it is consistent with:

- Mozambique National Water Policy,
- Mozambique Poverty reduction programme,
- Millennium Development Goals,
- AusAid's support to WASH sector in Mozambique as outlined in the 'water services and institutional support – WASIS' programme document as well as
- Mozambique UNICEF programme of cooperation (2012-2015)

The stated intention of NAMWASH is also consistent with key priorities identified in AusAID's overarching SWaSSA programme, which sets the framework for water and sanitation interventions in Africa which are:-

- Increased access to safe water, effective sanitation services and improved hygiene knowledge and practices in selected secondary cities, peri-urban areas, towns and market centres.
- Improved service delivery sustainability in the WASH sector in selected secondary cities, peri-urban areas, towns and market centres.

(Sustainable Water and Sanitation Services for Africa 2012-2016 (SWaSSA) AusAID's draft sector Delivery Strategy)

Explaining the focus on secondary cities, towns and market centres, SWaSSA further highlights the intention to "address critical pressures on WASH service delivery resulting from urbanisation, population growth and mining driven economic growth". The NAMWASH programme design identifies the expected economic and population growth as a result of investment in transport infrastructure along the Nacala Coal Corridor and notes that: "This spatial growth will place strain on existing water supply and sanitation services and will require significant social investment." One of four criteria for the selection of the NAMWASH towns was thus their location on the Corridor. The other criteria included

- institutional responsibility for the towns lying with AIAS (as AusAID's GoM partner);
- minimal investment available from other sources for the selected towns; and
- low water supply and sanitation coverage.

At a more detailed design level, considering the core objective of access to and encouraging use of sustainable safe water supply and hygienic sanitation, the NAMWASH progamme addresses water supply issues through the provision of water supplies to schools and a few interventions to rehabilitate and expand town water supply systems, which are almost uniformly deficient in the five NAMWASH towns.

The extent of the water supply system interventions is limited, primarily by budget constraints. The number of beneficiaries in the Phase 1 project to improve the water supply system in Ribaue had to be reduced from a target of 12,000 to just 8,000 for this reason, as a result of cost increases in labour and materials, which exceeded the provisions of the original estimates. It is expected that Phase 2 interventions will be similarly constrained. A further water supply intervention is the provision of school water supplies, based on boreholes equipped with handpumps. These were found to have significant community impact, through use by surrounding households, although it was not clear whether this was the original intention and there is some uncertainty at project management level about the desirability of encouraging community use of school systems. An indicator of this uncertainty is that the community benefits were not accounted for in Programme target setting. However, it is noted that increased community coverage is highly relevant to the Programme's broad objectives

In relation to sanitation, little progress has been made to realise the original intent of addressing the future needs of the core urban areas. This is largely due to the fact that the anticipated need for wastewater management (including removal and disposal of on-site liquid wastes as well as providing basic drainage and treatment systems) has not yet materialised because current water supply deficiencies have greatly limited the generation of waste water although this is likely to change if and when improved water supplies become available.

Similarly, at the household level, it had been intended to promote private sector intervention to assist with the emptying and disposal of household latrine contents as well as in the production of latrine components. In practice, there is limited demand for such services because the typical household plot is sufficiently large that there is space to enable full toilets to be covered and new ones to be built. Since coverage with latrines at household level is generally quite high, there is also only limited demand for the construction of new latrines using locally produced building components and some evidence was seen that improved latrine slabs are already being reused for this purpose.

At a household level, the focus of the Programme has been on promotional activities aimed at discouraging open defecation and promoting behavioural change, notably handwashing. There has been demonstrable uptake of the technology designed to facilitate handwashing (the "tippy tappy" units) and anecdotal evidence that the health and hygiene messages have influenced behaviour. However, it is difficult to determine the sustainability of this intervention since the NGO contractors are still active and sustainability will be determined by continued behaviour modification only some time after they have departed. An alternative approach might have been to identify areas in which household sanitation coverage is deficient and to adapt the PEC programmes and provision of latrine components, to focus on these.

Related to this, little practical work was reported at the level of poorer households, which are likely to rely on on-site sanitation in the medium-term, to understand their opportunities and constraints and to design subsidy and support mechanisms that will enable households to upgrade their existing sanitation provision. A decision has been taken to provide subsidies to formally identified "vulnerable families" but no analysis has been carried out to determine whether this will address the overall affordability constraint. The provision of full subsidies to the poorest families may also have the unintended consequence of identifying sanitation improvement with poor people rather than as an aspirational objective. This puts in question the value of health and hygiene promotion, which may change behaviour in useful and important ways (by encouraging the use of toilets, the washing of hands and the safe use of water etc.) but whose impact may be limited by the absence of water and safe household sanitation facilities to enable households to give effect to these behavioural changes.

Because of this constraint, a key intervention for the Programme has thus been the construction and/or improvement of sanitation facilities in public institutions such as markets and hospitals/health centres as well as at schools. These interventions are relevant to the Programme 's goal of improving community sanitation and they do support efforts to reduce open defecation.

The practical response to the challenges encountered in providing infrastructure investment that might enable communities to respond to the Programme's promotional activities highlights some areas of concern in Programme design. Specifically, while the general approach is relevant, there is little evidence of systematic logical design. Thus, in Phase 1, core town water supply issues are only being addressed in Ribaue, through the rehabilitation and expansion of an existing water supply system. Yet, well before construction even begins in Ribaue, parallel efforts are being made to develop initiatives aimed at managing waste water. There was little evidence that the broader challenges posed by this approach were recognised and addressed. Since the rate of uptake of different water supply options will determine how much waste water is generated and will need to be managed, building a better understanding of likely water use patterns must precede detailed work on the provision of sanitation options. This appears not to have been recognised, as indicated by the decision to produce sanitation master plans rather than following the normal practice of producing combined water and sanitation plans.

As a result, the focus on sanitation infrastructure in Phase 1 did not adequately take into account the state of water supplies in the five towns. The envisaged opportunity for the development of on-site septic tanks and similar solutions, potentially to be linked later to simple drainage networks and basic treatment facilities, will not emerge until a reliable water system is in place. It is only then that households, public and commercial institutions will be able to consider the opportunities that a reliable water supply allows for sanitation improvements and can make decisions based on the actual cost of water. The Programme's focus on liquid waste management therefore appears to be premature and reflects a failure to consider carefully the appropriate sequencing of WASH activities in urban areas.

A further question of relevance relates to the intended urban focus of the Programme. While the specific water supply and sanitation service provision elements are being implemented in a reasonably comprehensive and effective manner, there is little evidence to suggest that the interventions chosen were designed taking account of the stated strategic objective of providing social investment to cater for expected urban growth. This was evident in a failure to consider the physical settlement patterns in the administrative jurisdictions chosen and to decide where interventions should be focused. In all cases, these included both

an urban core and extensive outlying settlements whose characteristics were more or less rural across social, economic and physical dimensions.

As a consequence, some of the Phase 1 interventions visited by the evaluation team served clearly rural communities. This was in turn because the motivation for the selection of towns and the intentions for targeting investment had not been explained to local authorities responsible for identifying specific areas for Programme investment. This was confirmed by a number of interviewees. When questioned about the approach taken to identification of schools and communities for intervention, one municipal head stated that "my objective is to achieve equal levels of services across my municipality". In another case, a newly resettled rural community had been included through water supply improvements to a small recently established school; school officials and community members suggested that since "we have only recently returned, we need the help of the Project". Further evidence of the absence of appropriate targeting was that groundwater availability (rather than development criteria) was reported to be an important factor in deciding the locations to which contract drillers were directed (since they were only paid for drilling successful wells).

In this context, an important concern that was raised by a number of interviewees is whether the "corridor" developments will indeed generate levels of economic and social development in the selected towns that require targeted intervention. The consultants responsible for the master plans considered a range of potential population growth rates and (in the current draft of) the plans, suggested that a mid-range rate of just under 4% be used for likely population growth, although they also considered a higher growth scenario.

To obtain some indication of potential for growth in economic activity, which might be expected to be translated into population growth, a meeting was held with the Nacala Corridor Company, which is responsible for the railway development. The company identified one immediate impact, stating that an estimated 2000 temporary construction jobs will be created at sites along the corridor over the next three years. More significant in the long term however is the fact that the line has been designed as multi-purpose infrastructure. Aside from transport of 20 million tons of coal annually, provision is being made to expand its general cargo capacity, from the current 300,000 tons per annum to four million tons. This will enable the line to support a significant expansion of agricultural production and other economic activity in regions adjacent to the line, which is in turn likely to impact on levels of economic activity in the Programme towns.

From the above, it can be seen that, while the Programme activities are generally relevant to general goals of improving water supply and sanitation, they would have been more effective if their sequencing had been more carefully considered. So not only is the absence of adequate water supply a key local priority in which action would address the broad goal of improving community health while giving effect to demand responsive, participative approaches, it is also a requirement for the intended sanitation improvements.

A final question of relevance relates to the priority given in Phase 1 of the Programme to the supply of water to schools, the logic for which is unclear. In the site visits, it was observed that the school water supplies were extensively used by surrounding households as well as by school students. Local households were also actively involved in the water management committees which evidently contribute to the sustainability of the supplies. Yet the benefit of supplying these households was not taken into account in Programme design and some interviewees expressed the view that joint use of water supply installations was contrary to the intentions of the "Child Friendly Schools" approach which is guiding this element of the Programme.

To the extent that "saving lives through increased access to water and sanitation" is an over-arching goal of Australia's WASH aid in Africa, the benefits of a school-focused approach needs to be compared with those of a community focused approach. While school water supplies will have an educational impact, and will enable the child to maintain hygienic behaviour while at school, health outcomes will be far more dependent on the state of water supply, sanitation and hygiene in the household. It might thus be more appropriate to adopt a more general objective in Phase 2 of the Programme, namely to improve community water supplies with the complementary intervention of ensuring that adequate water supplies are available in or in close proximity to schools.

#### **Effectiveness**

#### Rating: 4

This section of the evaluation seeks to determine whether NAMWASH is on track to achieving its objectives. In undertaking this assessment it is first important to outline the specific objectives of the programme: in terms of the outputs it sought to achieve during the first phase of delivery but also in terms of more general behaviours which the programme is expected to exhibit such as strong management, governance, and strong partnership working and coordination.

#### Verification of outputs

The specific outputs to be achieved during Phase 1 included:

- 12,000 people with safe drinking water in one small town
- 10,000 people with safe sanitation in two small towns
- 10,000 people with improved hygiene practices in 5 small towns
- 20,000 school children with access to safe sanitation
- 7,000 school children with access to safe drinking water
- Baseline completed in 5 small towns
- Sanitation master plans developed for 5 small town
- Gender and disability objectives addressed in programme and institutional arrangements

A summary of what has been achieved to date is outlined in Annex E and this is discussed in the subsequent paragraphs. Progress towards Gender and Disability objectives are covered in a later section of this evaluation report.

Work to rehabilitate and expand the Ribaue water supply system has just started but it is already acknowledged that the target (PAF 1-1) of meeting the needs of 12,000 people with safe drinking will not be reached. Only 8,000 people will be reached following scope reductions due to cost increases. It is noted some communities have benefitted from the provision of water to schools (PAF 1-4). Whilst this is not an explicitly output target for the programme it is a positive unintended consequence and could be enhanced if achievement of community benefits is specifically targeted through school selection. There are opportunities to take over and rehabilitate old railway water supply infrastructure, to improve supplies to areas close to the urbanising cores of Ribaue (bairro Namiconha) and Namialo as well as other towns.

The team was unable to verify the progress reported to meet the target (PAF 1-2) of 10,000 people with safe sanitation, specifically 'improved' latrines provided by local artisans who had been supported by the Programme. Various sources cited cost as a barrier to adoption and a local artisan in Ribaue reported that he had not sold any improved latrine slabs in Ribaue this year although he had "exported" a substantial number to an organisation in Cuamba. Slabs used for households in Ribaue were left over from an earlier Red Cross intervention; in Rapale they came from an MCA intervention. The relatively high proportion of households that already had a "traditional" latrine, often well built and in good condition, raised doubts about the demand for and feasibility of upgrading with "improved" components. These findings highlight that the programme objectives and instruments to improve household sanitation might not be adequate and suggest that an alternative / stronger focus on the use of mechanisms to support artisans to reduce the price of sanitation infrastructure to users; technical approaches to upgrading existing latrines; and marketing strategies that include development and implementation of innovative approaches.

Substantial activity was verified to implement the goal **(PAF 1-3)** of promoting improved hygiene practices amongst 10,000 people in 5 small towns. However, it was not possible to verify what progress has occurred as a result. This is due in part to the relatively short period of time that has elapsed since the activity began. However, it is also due to the fact that monitoring information on impact is collected by the service provider, which cannot be fully objective. A further issue is that PEC approaches were at times inappropriate to the audience concerned – e.g. promoting improved latrines, by explaining their benefits, to people who already had well-built traditional units.

The PEC approach is well-established in the water and sanitation sector in Mozambique and has been widely used by the GoM and UNICEF for social mobilisation and sanitation and hygiene promotion. It is geographically focused and involves a contract between Local Authorities and an NGO who has knowledge

of the cultural, religious and linguistic context of the district. It is however only proven to have desired effects within a rural context and the evaluation team raised concerns about the extent to which the approach had been adequately considered in its appropriateness for an urbanising town. Whilst UNICEF had sought to use the Total Sanitation and Sanitation Marketing approach to adapt the PEC approach to be 'fit for purpose' in urban areas<sup>3</sup>, evidence of its adaptation was not found.

Significant progress was verified towards the achievement of the goal (**PAF 1-4**) of providing 20,000 school children with access to safe sanitation. It was noted that in some cases, school latrines had previously been provided; however even in those cases it was not clear that the number of "seats" provided is adequate for the number of students and all were below the UNICEF guideline of 25 children / toilet. But some toilets built before NAMWASH appeared to be little used, highlighting the importance of monitoring use after construction.

The most visible progress that has been made is towards meeting the goal (**PAF 1-4**) of ensuring that 7,000 school children have access to safe drinking water. A number of schools were visited with working handpumps on boreholes constructed by the programme. At these schools, water committees, with substantial involvement of local community members were active in monitoring and management and, in a number of cases, could demonstrate that they had successfully dealt with problems that had emerged. In many cases, it was clear that the surrounding community was using the pumps, providing an incentive for this engagement. This complementary benefit has not been adequately captured or considered in programme design. It was also found that in many cases, pumps were installed in communities that were predominantly rural, suggesting that the programme's focus on supporting urbanisation had not guided site selection.

Completion of the **Baseline (PAF 1-5 & 6)** was verified. However, it was noted that the Baseline has not met all the objectives that it was hoped it would serve. While the data collection and household selection methods used were sound, the sample size only allows assessment of the overall programme, not of each town. This also reduced the value of the Baseline for Masterplanning purposes since it does not provide statistically valid information that can be used at the level of individual towns. While the Baseline was produced after the programme had started, some evidence was presented that it is now informing programme design although there was no clear evidence that findings of the institutional assessment have been integrated into design.

Sanitation Masterplans for three towns were provided to the evaluation team, although still were still in draft form. These should provide guidance for future interventions to improve sanitation. The Masterplans are still to be initiated for the final two towns and will be completed too late to provide specific information to Phase 2 of the Programme although the general approach will be useful. The plans lack details for water supply and further work may be needed to generate an overall WASH Masterplan. Opportunities for small private enterprises are identified but there is limited analysis of commercial potential of such activities. The linkage between sanitation and urbanisation is addressed, with land identified to be reserved for wastewater collection and treatment infrastructure.

#### **Management and Governance**

Our review of management and governance arrangements and processes included consultations with a range of AIAS and UNICEF programme delivery staff, and those involved in implementing the programme in each town visited. Questions were asked about the monitoring processes, clarity of roles and responsibilities, and effectiveness of communication between delivery partners.

Monitoring of components of NAMWASH which are led from Maputo are verifiable. These components include the Baseline and Masterplans. For operational work undertaken in Nampula, the quality of monitoring information is more variable. For example PEC monitoring of impact is undertaken by the delivery team without any consistent verification processes in place. Furthermore at a local and provincial level no evidence of robust monitoring systems was found, progress updates appear to be ad hoc, unverified and carried out in line with AusAid 6 monthly reporting periods. This finding was further verified for AIAS in particular from an Institutional Capacity Assessment which was undertaken by a donor organisation<sup>4</sup>.

<sup>&</sup>lt;sup>3</sup> NAMWASH Design proposal prepared by UNICEF, December 2011

<sup>&</sup>lt;sup>4</sup> COCA Questionnaire for Water and Sanitation Infrastructure Administration (AIAS)

When progress updates are undertaken these are communicated to all relevant stakeholders. Risk management does not appear to be systematically undertaken and aligned to project management practices and this means that issues such as reputational risk to AusAid and UNICEF are not been considered regularly. For example in the decision making process in Rapale where sanitation facilities were provided without solutions for the most pressing needs of the community being addresses – access to water.

It was evident that the overall governance of the Programme has been constrained by the absence of an AusAID presence in Mozambique and by the fact that the AusAID management team does not speak Portuguese. As a result, the management team have limited access to Programme participants and documentation and rely heavily on UNICEF, as their Implementing Partner. The interaction with AIAS, as the lead GoM agency, is weakened as a result of this arrangement. A consequence is that lines of accountability are strongest from UNICEF to AusAID and much weaker from UNICEF to AIAS and from AIAS to AusAID, particularly with respect to strategic issues, such as the direction, content and emphasis of the programme. Since AIAS must formally represent the interests of the eventual beneficiaries, this structure weakens the ability of Mozambican beneficiaries, at all levels, to hold UNICEF or AusAID accountable for interventions (and vice versa).

#### Coordination

Evidence from the evaluation review of documentation and stakeholder consultations highlighted that there is good coordination between partners at local and provincial levels prior to NAMWASH and that the NAMWASH programme is also coordinating well at local levels. At the level of District Administrators in the towns which were visited by the evaluation team a strong sense of local ownership, and clear knowledge of the programme objectives and progress to date was demonstrated.

Key areas where coordination could be improved were at national levels, other donor programming and also alignment of the programme's focus between AusAid and UNICEF. Coordination could be improved between the NAMWASH team and other government departments: including the Department for Education and the relevant department responsible for the Nacala corridor (Department of Finance and Development). For example limited linkages with the parallel town structure planning processes were evident; also, coordination with the Ministry of Health was not occurring although this may have been useful specifically in relation to the PEC elements of the project where the Ministry is already engaged in similar activities.

## **Efficiency**

#### Rating: 4

In order to assess the efficiency of the programme to date the evaluation team undertook a review of value for money and the effectiveness of the budgeting process. This involved reviewing the original 'planned' budget for Phase 1 against an updated 'actual' budget, discussions with staff responsible for procurement of goods and services under the contract, a review of the quality of outputs which have been generated for the price paid and any evidence relating to the quality / scale of outcomes which will be produced.

The original proposal assumed a total programme budget planned over the five years of the programme as USD 30 Million with AusAid contributing 23 million, UNICEF contributing 3 million, the GoM contributing three million and communities contributing one million. During the first 18 months the total allocated budget was approximately USD150k higher than the originally budgeted USD 6.5 million.

#### **Review of budgeting process**

The review of original budgeting assumptions and changes to these over the delivery period for Phase 1 generated the following reflections:

The cost of delivering an extension to the current piped water system in Ribaue has increased as original assumptions about the cost of materials and labour have changed and this was not accounted for within the original budget. It would have been beneficial to have a contingency fund specifically for the infrastructure investments such as improvement of water supply systems. In Ribaue the number of beneficiaries to be reached by the extension to the piped water system has decreased. Information on population density and locations were not accurate during the design phase. Further research would have been beneficial during the design stage in order to inform the project costs and assumptions about the number of beneficiaries which could be reached.

Salary costs have increased for both UNICEF Head Office staff and also for in-country staff. These costs were not foreseen and as a result the overall cost of delivery has increased. The budget for the sanitation

aspect of the programme has been reduced however it is assumed that the number of beneficiaries reached will stay the same. This raising concerns about the quality / effectiveness of the sanitation intervention. The evaluation team is concerned that the budget reduction, coupled with the lack of evidence of plans to support physical sanitation improvements at household level, will result in a further reduction in project scope and beneficiaries reached or will be achieved through greater focus on rural areas, which is not in accord with Project objectives..

There was an error in the original budget which was signed off by AusAid relating to the GoM contribution in original proposal. The size of the total GoM contribution is less than originally assumed as the AIAS do not have a remit to support outputs in schools. This was an error in the UNICEF budgeting sheet rather than a miscommunication from the GoM. No attempt had been made to communicate the error to AusAid until the point of the interim evaluation or to seek additional funding support from alternative GoM sources such as the Department for Education.

Overall budget management did not appear to be undertaken regularly and systematically and was only being addressed when a formal review was taking place. Communication of changes to the design assumptions and associated budget between UNICEF and AusAid was not frequent enough to allow for trade-offs to be thoroughly assessed by both parties.

#### **Economy**

To review the economy achieved to date the evaluation team spoke with those responsible for undertaking procurement for the programme and also a small number of contractors who are delivering services in the small urban towns.

It was clear from the procurement processes documented that the GoM procurement rules are being followed rigorously for all goods and services. This process is very robust and helps to achieve good value for money. It is however a lengthy process when applied to procuring small pieces of time sensitive technical consultancy support or operational interventions and may be limiting the choice / quality of providers who are interested in tendering for such work. Setting up a "call down" framework could provide quicker access to high quality suppliers and still enable the programme to achieve value for money.

The delivery team have been improving the procurement process over time and this has included changing stipulations in the tender documents about where the bid needs to be presented. Previously tenderers were required to present their bid in Nampula and this was restricting the number and quality of tenderer applying for relatively significant contracts. Following feedback from potential bidders UNICEF have changed this stipulation, in consultation with DPOPH and AIAS, to allow for a more inclusive process.

Whilst consultation evidence suggested that DPOPH and AIAS were engaged in signing off procurement procedures at key milestone point, they were not engaged in running the procurement process more fully. This could be an area where local ownership and accountability for the programme could be further improved.

#### **Efficiency**

Given the current stage of the programme delivery it is difficult to make a fair assessment of the extent to which it is being delivered efficiently. To review the efficiency of the programme the evaluation team need to undertake an assessment of the cost per beneficiary supported in comparison to what was anticipated when the programme was signed off by AusAid 18 months prior and ideally to other similar programmes. A full cost efficiency assessment cannot be made for the following reasons:

- Proportions of the budget spent during the earlier stages of delivery will go on research, set up and consultation this will not allow for a fair reflection of the programme's efficiency to be made.
- An up to date expenditure analysis was not available in the most recent progress report, neither was it available in time for the mission by the delivery partner and no hard copy of this information had been provided to the evaluation team by the end of the mission.

The evaluation team can however review the projected number of beneficiaries to be assisted under each strand following the more recent budget clarifications and provide AusAid with an assessment of whether the programme efficiency projections are stronger or weaker than originally assumed.

The cost per beneficiary reached for Output 1: improving water supply in one small town is likely to be significantly higher than anticipated (\$200 as opposed to \$100 per beneficiary reached). This is as a result of changes to the original assumptions about the cost of construction work and also the population density and geographical locations within the town.

Spend on Output 2: Sanitation and Hygiene promotion is forecast to reduce from \$1.87m to \$1.33m (approximately 30% less). The total number of beneficiaries to be reached through this output remains the same and the evaluation team have raised concerns about why there is such a discrepancy between the original budget and the revised forecast. It is suggested that more detail is provided as to whether the quality of activity will change as a result of the budget decrease.

The evaluation team considered the cost of reaching beneficiaries through PEC was high in relation to the cost of a latrine and that the delivery team should review the current method of increasing access to improved sanitation and, in particular, consider the optimal balance of expenditure between promotional activities and support for improved household sanitation infrastructure.

In some cases the project could have had a greater number of additional / unintended outputs generated if schools selected had been larger or less rural and with greater potential for community use. This was discussed previously in the 'effectiveness' section.

#### Cost effectiveness

Whilst a cost effectiveness assessment cannot be made without robust evidence of outcomes achieved some areas can be highlighted which might impact on the quality / achievement of programme outcomes;

- There are risks to using consultants to do the planning work who are not located close to the local areas.
   These are institutional plans and as such require close engagement with participants in their production to be effective.
- As a result of the payment arrangements put in place for contractors working on achieving the school WASH output target boreholes are being drilled where they were most commercially viable. This should not be the only criteria and the overarching programme objectives must have greater impact on the locations, for example: the focus on urbanising areas.
- There is an important distinction between providing 'access' to water for children at school and access to household water (on average, a child at school needs access to 1 litre per day and household needs 20 litres). It is important that the significant component of the programme which focuses on providing water in schools considers broader community access so as to have the greatest benefit to child health.
- It is currently difficult to determine how many people have changed their knowledge and behaviour around sanitation and hygiene as a result of the communication from UNICEF and their delivery partners. The monitoring information is being collected too soon after intervention delivery and is not independently verified. The team who are delivering the intervention are solely responsible for gathering information on outcomes achieved. A formal determination will only be possible after the sustainability check proposed for 2014 and the end-line survey in 2016 but, in the interim, this should be a concern for Project management.

#### **Impact**

At 16 months into delivery it is too early to assess the impact of the NAMWASH programme. For example during the evaluation fieldwork period sanitation blocks were in the process of being built, and the improved piped water supply in Ribaue was in the first stages of construction. The evaluation team did however seek to find evidence / preliminary indicators that impact would be generated and review the plans for assessing impact longer term.

For the school WASH component in particular more progress could be seen. Early self-reported indicators of impact included:

- As a result of improved school access to drinking water some children were reported to be coming back to school after leaving due to lack of water availability;
- Incidence of disease dropping in schools where improved access to water has been provided; and
- Communities were using water pumps located in a number of schools visited.

Murdoch University have been contracted to undertake an assessment of the programmes impact assessment process. This work focused mostly on the quality of the sampling and questionnaire design that had taken place and made a number of recommendations about how to improve data capture at the latter stages. Neither this document nor the baseline report clarify the exact nature of the impact evaluation which will be undertaken, what hypotheses are being tested, and what analysis methodologies will be employed. This lack of clarity and focus for impact measurement techniques across all aspects of the programme –

including the evaluation of the institutional capacity building work - should be rectified at the earliest opportunity.

## **Sustainability**

Rating: 4

A key criteria for Programme success will be the sustainability of the various Programme elements. Since, as with the assessment of impact, it is very early to seek to identify sustainability outcomes at this stage of the Programme, the focus of the evaluation was on the actions that are being taken to ensure sustainability. For this, it is helpful to consider the different dimensions of the Programme.

Thus, for the <u>community water supply component</u>, there is an explicit focus on sustainability through the objective of implementing / strengthening the GoM's policy of encouraging <u>delegated management</u> of water supply systems' operations. The specific objective is to implement this approach in the towns and small cities for which AIAS is responsible. The Programme has initiated activities in order to promote this objective (discussions with municipal authorities, identification of potential private operators) but these have not yet progressed very far. While the intention reported in the initial progress report was .... "UNICEF is supporting AIAS in the completion of the tender documents to ensure the operator is selected prior to the commencement of the build phase of the contract "this had not been achieved at the time of the evaluation mission. Indeed, according to the subsequent progress report (April 2013), it was only in March 2013 that the information was ready to prepare the regulatory framework for the Ribaué water supply system to enable the tender process to go ahead. A "willingness to pay" survey was one element of the information required. This, together with the payment structure for water, will provide some guidance about the likely levels of use and therefore potential income for service providers.

The willingness to pay survey that has been completed is not at a level where it can provide more than indicative information about likely outcomes. Specifically, the range of options considered at the lower levels of affordability were too wide to provide robust guidance. The survey results suggested that affordability may be a barrier for the majority of the population and will certainly limit the number of households that can afford to access domestic piped water connections. Across the entire town, 16% of people were unwilling to pay anything and 68% were willing to pay in a rather wide survey range between 1 and 49 MT/month (0 – US\$1.80/month). The estimated cost for supply from standpipes is between 17 and 20MT (US\$0.60 – 0.70 per month). From the willingness to pay survey, it is not possible to determine what proportion of households would be able to pay this amount, which is around 7% of the average household income in Ribaue (approximately 300MT/m, US\$10/month), somewhat higher than the 5% that is usually considered to be affordable, although the situation was slightly better in the areas closer to the urban core. Affordability could thus become a barrier to the sustainability of delegated management arrangements unless there was significant growth in economic activity that will support the costs of piped water supplies.

The sustainability of school water supplies, provided through boreholes equipped with handpumps, is more favourable, largely because costs are lower and households that benefit from the use of school water supplies are willing to contribute to a maintenance fund. In most of the schools visited, the water committees confirmed that they were collecting funds and, in some, the funds had already been used to pay for small maintenance and repair activities. In these cases, sustainability issues may be related to problems of fund management if there are no major expenses to be met.

The situation with respect to the sustainability of <u>household sanitation infrastructure</u> improvements could not be assessed since there had been very limited progress in this regard. Contrary to the expectations during project preparation, the emptying of full toilet pits was not a general problem since, in most cases, there was adequate space in household yards for new pits to be dug; this suggested that the provision of moveable improved latrine slabs is still an appropriate technology although it limits the value of improvements that are likely to be made to latrine superstructures since this is less easily moved. In the few cases where, because of limited space there may be incentives to empty rather than move household toilets (for example in the centre of Namialo town) no progress on this was reported.

The sustainability of <u>school and institutional sanitation infrastructure</u> has not yet been tested. In these cases, since solid superstructures have been erected, it will be desirable to be able to empty the pits and retain use of superstructures. One aim of the Programme is to develop options using private service providers to undertake the removal and safe disposal of liquid wastes but little progress has been made so far and it is not yet possible to draw conclusions about the viability of such approaches.

Substantial effort has been made in the <u>promotion of behaviour change</u> with a focus on hygienic behaviour (ending open defecation and encouraging handwashing) and improvements in household sanitation infrastructure. While there is evidence of impact through the adoption of the "Tippy Tappy" handwashing system (see above), it is not obvious that behaviour change will continue in the absence of ongoing action. In this context, the general finding of an absence of substantive engagement with health workers is a matter of concern; this was confirmed in Ribaue where, although the Programme was working with the hospital, there were no active links with the district head of preventive medicine.

## **Gender Equality and disability**

#### Rating: 4

The team found that, while there was general acknowledgement of the importance of addressing **gender**, this priority was not always translated into systematic approaches. One of the more obvious examples of this was in the provision of sanitation facilities for out-patients and visitors at hospitals, as part of PAF1-2. In Rapale, although women represented a substantial proportion of the target group (at least 75%), an equal number of sanitation facilities were built for men and women. This suggested that no demand assessment had been conducted or that gender issues were not considered in the assessment.

At schools, where substantial progress is being made in the provision of physical sanitation facilities as part of PAF1-4, there was regular reference to the importance of supporting girls to meet their menstrual hygiene management needs, but virtually no practical explanation or demonstration of what that meant in practice. In one school in Ribaue, a type of bidet had been constructed but since this was a dry toilet, it was not clear how it was supposed to be used. There was no discussion of sanitary towel provision or facilities for reusing cloth towels.

"Without a safe, private space, with adequate facilities for washing the body, menstrual materials and clothing, women and girls face difficulties going about their daily lives. The lack of privacy and the necessary infrastructure for cleaning and washing, the fear of staining and smelling, and the lack of hygiene in school toilets are major reasons for being absent from school during menstruation, and have a negative impact on girls' right to education<sup>5</sup>."

The inability of the Baseline exercise to capture information on menstrual hygiene practices was raised by the Murdoch review and suggestions about how to improve on this were also provided. These included lessons from work undertaken by other organisations such as WaterAid who have successfully used self-administered questionnaires with closed questions in Nepal.

In the implementation of the Programme, it was noted that women were well represented in the teams engaged in community promotion and education activities and that they took leadership roles in many cases. There was also a female member of the sanitation masterplanning team. However, there was limited evidence of female involvement in other activities such as construction. While there was significant representation of women in local water committees associated with the school water supplies, consistent with reports that 43% of committee members are female, the active leadership of those met was almost exclusively male.

There was no evidence that there had been a systematic effort at Programme level to engage with local authorities to address these issues. The team met in Nampula with the Provincial Director of the National Institute for Social Action (INAS) which has responsibility for, *inter alia* both gender and disability issues. He was unaware of the Programme and it was confirmed by Programme officials that the Provincial office of INAS had not been contacted. In the meeting with the evaluation team, the INAS representative offered to provide guidance and support to help to achieve full and active participation of women in institutional activities as well as to assist in ensuring that women take a more active role in local water committees.

The situation with respect to <u>disability issues</u> was similar to that for gender. Some interventions were observed, as for instance, in some cases, school toilets are being built with sufficient access to enable them to be used by disabled children, using local technical standards. However, the importance of giving attention to disability issues, while frequently addressed in project documents, was often not matched by systematic action. Indeed, most references to disability in the most recent Programme Progress Report (April 2013) were to future activities that were planned (such as identifying the number of people with disabilities in

<sup>&</sup>lt;sup>5</sup> Cited in the Murdoch UNICEF Report on the suitability of the Baseline evidence for NAMWASH.

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communities where educational and promotional activities had already been undertaken) rather than activities successfully concluded. Monitoring information should be clearly disaggregated for disability but it was not evident that this is taking place.

As an example of the absence of a systematic approach, at one school in Monapo, when the team asked whether provision was being made for disabled children, the response was that there were no disabled children in the school at present. The questions of whether there were disabled children in the community or how future disabled children would be provided for had apparently not been asked. In the Progress Report, it is noted that 2 units have been provided for disabled children in Ribaue (out of 12 facilities built). It is not however mentioned whether similar provision is being made in the 89 facilities that are being built in the other towns.

Further evidence (and potentially a contributory factor) to this absence of a systematic approach was that limited effort had been made to engage with provincial organisations that work with disability. The team was told by national Programme management that one reason for this was that there were no institutions in the Province active in this field. Yet, in consultation with the INAS Provincial Director (see above), it was clear that the organisation was working throughout the province and had a number of partnership activities in the Programme towns. It was stated that there might be a potential to link local activities of INAS and its partners with employment generating opportunities, for instance in the management of public water and sanitation facilities. Once again, the Provincial agency of INAS was not aware of the Programme but expressed its interest in engaging with it and offered its support.

It was noted that, although INAS had not been involved on gender and disability issues, the INAS social security system has been identified by the Programme as the instrument that would be used to target sanitation subsidies in cases where households are too poor to afford the sanitation improvements promoted by the Programme.

## **Conclusion and Recommendations**

Phase 1 of NAMWASH has made good progress in a number of key areas. A substantial number of children have benefited from improved water supply in their schools, which has also brought benefits to households in the surrounding communities. Work to improve the water supply system in Ribaue has begun. Work has also begun to improve sanitation in a number of schools and public institutions and an extensive programme of health and hygiene education has achieved some modest but verifiable impacts.

Where initial targets were not met, this was often a consequence of the rapid startup which saw implementation initiated ahead of activities that would have informed the design of interventions. Thus the fact that implementation was started simultaneously with the preparation of a baseline and the development of sanitation master plans meant that the planning initiatives could not inform the design of implementation interventions and that the masterplans did not benefit from the baseline.

While this has led to some consequent mis-targeting of activities resulting in some failures to achieve the initial targets, the combination of Phase 1 implementation together with the planning processes now being finalised has created a much better foundation for the design of Phase 2 of the NAMWASH Programme.

There is however evidence that UNICEF as the implementing agent has not sufficiently considered the implications of working to support urban development and that, in Phase 1, it applied community wide approaches derived from practice in rural projects. It is a matter of concern that there was limited evidence of any intent to make a critical assessment of the experience gained in Phase 1 to inform the design of Phase 2. The evaluation team believes that there is a need to make such an assessment which is likely to lead to a significant re- design of Phase 2 activities. Aside from refocusing the Project on the urbanising centres rather than entire administrative areas, such a redesign would consider giving greater emphasis to water supply as well as an approach to sanitation improvement that is more appropriate to the actual circumstances of the Project towns

At a more detailed level, the following conclusions were drawn:-

Many project outputs were verified during the evaluation visit. These include delivery/commencement of Ribaue water supply, sanitation promotion, sanitation master plans and school water supply and sanitation interventions. One area in which it was not possible to verify the outputs claimed in Ribaue and Rapale in relation to target 2 – an increase in the number of households with improved latrines built using components provided by local artisans.

Some programme interventions have been in predominantly rural areas which appeared to contradict the aims of supporting urban economic growth. The methodologies used for household sanitation promotion did not appear to have been designed to support urbanising communities which already have high levels of traditional sanitation provision and have prospects of further improvement but also face challenges of increasingly dense settlement which will increasingly limit their sanitation options.

Some aspects of the programme have not been demand-led by the local communities and the impact of the programme may be weakened as a result. One example was the provision of sanitation in Rapale in advance of the development of a water source for which there was significantly higher community demand. There is strong demand for water supply in most areas of the Programme towns but this has not been adequately taken into account in the design of school water supplies, although joint provision would maximize benefits and is likely to strengthen management arrangements.

There is reasonably good coordination between partners at local and provincial level but scope for improvement at national levels. Management and communication between funder and implementing partner regarding programme changes has proved challenging with delayed decisions on proposals to address problems identified in field and to give strategic direction more generally. The lack of formal relationship between AusAID and the AIAS, the GoM partner has limited the ability of AIAS to provide strategic direction to UNICEF as the implementing partner and limited the opportunities to develop AIAS' own capacities.

Planning for sustainability on the "supply side" of water and sanitation has been addressed (if not implemented) but demand side considerations need more attention. Attention has been given to the design, maintenance and institutional arrangements. Less attention has been paid to the interest and willingness of users to adopt project outputs or to develop, test and market new approaches that respond more closely to local conditions. Whilst it is too early to draw firm conclusions about the actual sustainability of programme intervention, some learning was already possible:

- There was encouraging evidence that some communities have been effectively equipped to mend broken pumps and deal with minor problems.
- There was also evidence that project intervention has already had positive impacts (e.g. practical arrangements were in place to manage the toilet and bathing facilities in Ribaue market).
- Health and hygiene promotion activities (PEC) are taking place although it has not been possible to
  validate their longer term impact and it is also not clear that they are being linked to the development of a
  strategic sanitation intervention plan that reflects local circumstances.
- It appeared to the evaluation team that the proportion of sanitation expenditure devoted to PEC was perhaps excessive and that a greater proportion could more usefully be spent on household sanitation infrastructure.

In some cases procurement & payment arrangements are having negative unintended consequences. For example: payment arrangements for small building contractors did not meet their working finance requirements and had resulted in delayed completion of sanitation blocks, although this was being addressed by the DPOPH. Procurement and payment arrangements for boreholes in schools appeared to influence the choice of schools to support and give undue weight to service provider interests.

Budgeting processes and communications between AusAid and UNICEF were not operating effectively. Original budgeting assumptions were incorrect for several aspects of the programme including: delivery, salaries, GoM contribution etc and evidence suggests that performance against the budget is not reviewed regularly and changes and / or mistakes are not communicated promptly.

The approach to risk management for operational components of the Programme is haphazard, contributing to delays in the identification of and response to problems as they emerge. At a provincial level, the monitoring systems, particularly for sanitation interventions, rely extensively on self-assessment.

#### Recommendations

A series of recommendations have been developed as a result of the evidence presented and the subsequent conclusions to this evaluation.

- 1. The evaluation team recommend reviewing the balance between programme objectives and community demand to guide both the allocation of financial resources and the balance between activities that focus on water supply and those that address sanitation during the second phase. Specifically this would mean:
  - a. The **focus on urban growth objectives** of the Programme should be strengthened in Phase 2 through the provision of clear direction to UNICEF, the programme implementing partner and specific guidance to municipal authorities on the Programme's objectives and the approach needed to support future social and economic development in the urbanising areas of their jurisdictions.
  - b. Given the high priority for water supply and the complementary impact that it can have for sanitation, hygiene and health, **opportunities identified to rehabilitate urban water supply systems should be prioritised** in Phase 2 by UNICEF.
  - c. The contribution of school water supplies to the broader community should be recognised by UNICEF and AusAid and systematically optimised since this builds school-community relations while meeting community needs and achieving the AusAID's high-level goal (as expressed in the SWaSSA framework) of "saving lives through increased access to water and sanitation".
  - d. Opportunities to **maximise the value of existing infrastructure in growth areas** should be explored: for example to take over and rehabilitate old railway infrastructure should be investigated.
- 2. It is recommended that UNICEF should review its approach to, and targeting of, improved household sanitation to ensure clarity about the objectives, and then develop appropriate strategy and instruments to support it.
  - a. Further effort should be made by UNICEF's programme manager to **link sanitation master plan production with the development of structure plans** for the towns.
  - b. It is recommended that in the final revision of the draft master plans, an attempt is made to **quantify the potential market for entrepreneurs** in different areas.
  - c. Sanitation master plans that have been developed for Ribaue, Rapala and Mecuburi should be used to guide the design of Phase 2 by UNICEF's Programme manager and AIAS delegation, in consultation with the respective town authorities.

- d. The **approaches to improve household sanitation should be** reviewed by UNICEF's programme manager, both household promotional activities and provision of infrastructure. This should include consideration of instruments such as mechanisms to support artisans to reduce the price of sanitation infrastructure to the users; technical approaches to upgrading existing latrines; and marketing strategies that include development and implementation of innovative approaches.
- 3. It is recommended that the programme team at UNICEF make better use of existing and specifically commissioned research and plans in order to guide delivery of the programme.
  - a. Lessons from previous water supply and sanitation projects and programmes should be systematically reviewed and built upon in the design of Phase 2.
  - b. The appropriateness of the UNICEF Healthy School guidelines (25 children per toilet) should be reviewed and appropriate guidance developed for the Mozambican context and applied in Phase 2.
- 4. It is recommended that **future master planning should address both water supply and sanitation**, since water availability determines sanitation choices, and linkages should be made with town structure planning processes wherever possible.
- 5. It is recommended that the UNICEF / AIAS delivery team seek further advice at a provincial, national and international level in order to **improve the programme's performance in relation to the inclusion criteria**. There should be formal consultation and engagement with representatives of provincial and local gender and disability organisations.
- 6. It is recommended that **coordination is improved between the UNICEF programme delivery team and other government departments**: including the department of Health, Education and the relevant department responsible for the Nacala corridor (Department of Finance and Development).
  - a. UNICEF, as Programme implementing agent, should ensure that its approach supports the policy of GoM of working with health centres and using APEs (frontline preventive healthcare workers) to promote and sustain health and hygiene interventions.
- 7. It is recommended that **amendments are considered to procurement and payment arrangements** by UNICEF and AIAS to make them more tolerant to the way small suppliers operate. Specifically:
  - a. Payment arrangements for small contractors should be reviewed to ensure that their working capital requirements are met while ensuring that adequate safeguards remain for the Client.
  - b. A "call-down" framework contract arrangement should be considered by the UNICEF Programme manager in Phase 2 to reduce the transactional costs of contracting service providers, particularly in arrangements to provide technical support to operators.
- 8. It is recommended that the UNICEF and AIAIS delivery teams should **improve the current monitoring** and evaluation plans and processes. Of particular importance:
  - a. Monitoring and evaluation plans and processes should be **clearly documented** for the programme and all parties should be trained in their responsibilities relating to Monitoring & Evaluation. This should be led by the UNICEF M&E officer with support from UNICEF's headquarters.
  - b. The lack of **clarity and focus for impact measurement techniques** across all aspects of the programme including the evaluation of the institutional capacity building work should be rectified at the earliest opportunity by the M&E lead within UNICEF.
  - c. **Monitoring approaches for PEC should be reviewed and strengthened** by the UNICEF programme manager, supported by a sanitation specialist to ensure greater objectivity and that the content of PEC activities be tailored to the specific circumstances of the particular communities concerned and be integrated into a broader sanitation marketing strategy.
- 9. It is recommended that the accountability of AIAS for Programme outcomes should be strengthened through the development of an explicit agreement about roles and responsibilities between AIAS and AusAID. This should include clear guidance on the relationship between AIAS and UNICEF that reflects AIAS' presence on the ground and accountability to its wider national constituency. AusAid should lead this process.
- 10. It is recommended that the project management and budget development and review process for the NAMWASH programme should be strengthened by AusAid in Pretoria and UNICEF's Programme Director.

- a. AusAid Pretoria should engage more effectively with UNICEF;s Programme Director, as its implementing partner, in order to ensure that the costing assumptions underpinning partner-led designs are robust and reliable.
- b. UNICEF's Programme Directorshould review its budgeting processes and should, for example, consider including a contingency item since the client (AusAID) cannot easily provide additional funding.
- c. The Programme budget should be more regularly reviewed by the UNICEF / AIAS NAMWASH delivery team.
- d. Consideration should be given to mobilising other sources of matched funding from departments such as Education for the schools based component of the programme by UNICEF's Programme Director and Manager.
- e. A more systematic approach to risk management is needed for operational components of the Programme in order to ensure rapid identification of, and response to, problems as they emerge. This should be led by UNICEF's programme director.

## **Annexes**

#### Annex A: (EX: Quality at Implementation Report for NAMWASH 01/12/2011)

"There are three strategic objectives for the NAMWASH program that are aligned to the SWaSSA are:

1) Improving access to water and sanitation

Facilitate increased access to safe water and basic sanitation that results in the provision of universally accessible facilities – this proposal will expand, in small towns, access to water supply for new users of safe water supply; new users of safe sanitation and appropriate hygiene behaviour; and for schoolchildren for improved water, sanitation and hygiene in primary schools.

#### 2) Promoting good hygiene practice and

Support the development of increased capacity to ensure hygiene promotion services bring about sustainable behaviour change— the approach will be adapted to the small town environment the best practices in Total Sanitation and Sanitation Marketing (TSSM). The PHAST methodology will be further adapted through NGOs working in the Government of Mozambique PEC ZONAL approach to ensure improved hand washing practices.

#### 3) Creating Sustainable Services

Support policies and strategies to keep services operating through effective governance and partnerships with multilateral agencies, civil society and business.—NAMWASH will place strong emphasis on institutional sustainability through support to the Provincial Delegation of AIAS, the reinforcement of the Provincial Directorate of Public Works Department (DPOPH), institution that oversees water supply and sanitation developments in Nampula province. "

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## **Annex B: Evaluation research framework**

Key Evaluation Question	Assessment criteria	QU	Research questions
KEQ1: What has been NAMWASH's progress	Progress to date	1	To what extent has progress towards outcomes during the first 18 months been as anticipated (as per logframe targets)?
		2	What explanations are there for the progress against outcomes to date?
		3	What have the key drivers / key barriers to progress been during phase 1?
against its Phase 1 target	Target setting	4	How were the targets for Phase 1 set?
outcomes and what has	raiget setting	5	To what extent is it consideration that the targets set for Phase 1 were appropriate and realistic?
influenced progress?	Reflections for Phase 2	6	To what extent do the targets for Phase 2 look appropriate and realistic based on the achievements during Phase 1?
	Reliections for Friase 2	7	Should any amendments be considered to the delivery model / plan for Phase 2 to enhance progress?
		8	To what extent do the objectives of the programme fit with the strategies & policies of AusAid in this sector?
		9	To what extent do the objectives of the programme fir with the strategies and policies of GoM in this sector?
	Relevance	10	How does the programme fit within the landscape of similar support in Mozambique?
	Relevance	11	To what extent have considerations relating to fit with GoM, and AusAid Strategies and policies and other support in the sector been addressed in the design and delivering of Phase 1?
		12	How have strategic and delivery fit considerations been taken on board?
		13	Are there any improvements relating to strategic and delivery fit which could be made during Phase 2?
		14	What factors and evidence base influenced the selection criteria for Phase 1?
		15	To what extent were the selection criteria and quality of evidence used appropriate?
	Evidence based	16	To what extent was the GoM and other stakeholders consulted and involved in the selection of targeted towns?
KEQ2: Based on		17	To what extent did the selection process enable the most 'in need' and 'appropriate' selection to be made to target the intervention?
experience and lessons to		18	How has the selection process for focus towns taken place for Phase 2?
date, what A11changes to		19	Are there any lessons which could be learnt for Phase 2 from what worked well and what worked less well relating to selection processes during Phase 1?
the NAMWASH design and implementation for Phase 2		20	What is the rationale behind the model of programme delivery - and in particular the Programme Management Unit set up to implement NAMWASH?
could be made to ensure	Effective - Implementation	21	To what extent has this model of delivery enabling delivery of results?
that it has the best possible		22	To what extent has this model of delivery created a barrier to delivering some longer terms outcomes from the programme e.g. building ownership within the government system?
chance to: achieve		23	To what extent has the hands on model of support provided to the Provincial Delegation of AIAS in Nampula Province been effective in achieving results?
outcomes that meet	models		How could the role of AIAS in program implementation be increased?
Government priorities; and		25	To what extent has the sanitation marketing been effective in driving up demand?
progress through AusAID's quality processes with		26	To what extent has the consultation and development process for sanitation master plans been effective in achieving local authority ownership and discussion of key issues such as sanitation
minimal changes?		27	To what extent have procurement and tendering processes ran by UNICEF during Phase 1 been effective and run smoothly?
g			What improvements to implementation models should be sought during Phase 2?
		29	Which partners does the programme engage with and in what capacity?
		30	What was the rationale behind the selection of partners and the level of engagement with them?
		31	Are there clear objectives for each partnership?
	Effective -Partnership Working	32	Are all partners aware of their role and clear about the objectives of the programme?
		33	What benefits have been derived as a result of partnerships?
		34	What challenges have existing in partnerships and to what extent has this impeded delivery?
		35	To what extent has UNICEF engaged in meaningful policy dialogue with GoM and LAs in key areas like decentralisation, approaches to sanitation, capacity building and local governance and what outcomes have been realised from this work?
		36	What partnership working improvements should be made during Phase 2?

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		37 What processes are being used by the programme to monitoring and evaluate performance?
		To what extent is the evidence provided by the current M&E system adequate for assessing performance and making improvements? (NB: review means through which institutional
		sustainability is being assessed)
		How is progress currently reported to funders and wider stakeholders and is this in line with reporting and accountability requirements?
	Effective - Governance &	40 Has the M&E system enabled any learning over the first 18 months which has directly led to improvements in programme delivery?
	Management	41 What improvements could be made to the M&E system and processes to enhance opportunities for learning and improved decision making?
		42 How effective is the current process for identifying and documenting risks to achieving outcomes?
		To what extent have effective risk mitigation strategies been put in place over the first 18 months?
		44 To what extent have programme risks been foreseen and managed effectively during Phase 1?
KEQ2: Based on		45 What lessons relating to effective risk management could be used to inform Phase 2 of delivery?
experience and lessons to date, what A11changes to		46 To what extent are all stakeholders clear about their role, responsibilities and levels of accountability for delivery for NAMWASH?
the NAMWASH design and		47 Economy: To what extent have procurement processes enabled goods and services to be procured at the best price?
implementation for Phase 2		48 Efficiency: What level of outputs have been achieved for the level of inputs expended? How does this compare to other AusAid WASH investments (if information is available)?
could be made to ensure	Efficient	49 Effectiveness: To what extent are there indications that sufficient levels and quality of outcomes are being derived from the investment?
that it has the best possible		50 Equity: To what extent have outcomes been distributed fairly e.g. gender considerations and people with disabilities?
chance to: achieve		51 What improvements in programme delivery could be made during Phase 2 to improve the value for money acehieved?
outcomes that meet Government priorities; and		52 To what extent has NAMWASH delivered behaviour change in the targeted areas in relation to sanitation?
progress through AusAID's		53 To what extent have the methods and modalities of sanitation being used increased?
quality processes with	Sustainability and impact	54 To what extent has the Phase 1 programme provided evidence of success or laid the foundations for the programme as a whole to do so?
minimal changes?		55 To what extent has NAMWASH delivered behaviour change at government / institutional levels in particular in relation to the support for the DMF by LAs?
		56 To what extent do stakeholders believe that the current delivery model is optimal for achieving the desired outcomes and impacts?
	-	57 To what extent has participation of women been considered in deisgn and implementation?
		58 Has the approach to participation of women been adequate in achieving the outcomes during Phase 1?
		59 To what extent has participation of people with a disability been considered in deisgn and implementation?
	Inclusion	60 Has the approach to participation of people with a disability been adequate in achieving the outcomes during Phase 1?
	Inclusion	61 To what extent have the following aspects been considered in design and implementation of NAMWASH during Phase 1: wilnerablility, effects on ecosystem, impacts on livelihoods?
		62 To what extent are systems in place to flag any aspects of delivery which might impact negatively on the environment?
		63 Yo what extent have any decisions taken or changes to the delivery of the investment in order to safeguard the environment?
		64 To what extent are safeguard issues being considered by partners and stakeholders?
KEQ3: How has		To what extent were actions of stakeholders operating in the sector at Government, regulatory, private sector and community levels coordinated prior to NAMWASH investment
NAMWASH contributed to improving sector	Coordination	How has this changed over the last 18 months.
coordination and how can this be improved for the		What actions of the NAMWASH programme have focused on improved communication, co-management and co-ordination, alignment of visions and objectives for these stakeholders?
Phase 2 design?		What benefits have any changes to these aspects created and how could this be improved during Phase 2.

## **Annex C: Evaluation team members**

Team member	Role
Mike Muller (External)	Team Leader
	The Team Leader's role is to effectively utilise the expertise of each team member in meeting the Evaluation TOR and contractual obligations. The Team Leader arbitrates differences of opinion, will take the lead drafting and is ultimately responsible for delivering a quality evaluation report. The Team Leader will lead fieldwork discussions.
Ms Kelly Beaver	Evaluator
(External)	Will lead on drafting an Evaluation Plan to govern the evaluation. Will participate in fieldwork. Will contribute to the overall evaluation and reporting, ensuring the evaluation is conducted in accordance with AusAID evaluation guidance and the Evaluation Plan.
Mr Marcus Howard	AusAID's Water Adviser
(AusAID)	Marcus has an oversight role across all of AusAID's water and sanitation activities globally. Marcus will therefore bring relevant experience from AusAID's other WASH programmes and in emerging global trends.
Ms Laila Smith (AusAID)	Senior Programme Manager, Water and Sanitation, Africa, Pretoria Post, AusAID.
	Laila was heavily involved in the NAMWASH design and subsequent monitoring of progress. Laila therefore has excellent contextual knowledge of the programme, of Mozambique, of AusAID and AusAID's wider engagement in Mozambique.
	It is ultimately up to the Team Leader to ensure the independence of findings and recommendations.
Ms Alice Crowley	AusAID Evaluation Manager
(AusAID)	Programme Manager in the Southern African Section, Africa Branch in Canberra, with responsibilities for water and sanitation. Canberra personnel in Africa Branch are expected to lead the evaluation process from an Africa Branch perspective. As such, the Evaluation Manager has oversight for the overall evaluation and overseeing the Evaluation Team. The Evaluation Manager will lead in drafting the Evaluation ToR, contracting and liaising with the evaluation team and oversight of the evaluation report and learning activities. The Evaluation Delegate (Director in Southern Africa Section) will have the final approval of the Evaluation ToR. It is ultimately up to the Team Leader to ensure the independence of findings and recommendations.

# Annex D: People / Agencies consulted

## Stakeholder consultations

Organisation	Representative	Role	Contact details (e-mail)
UNICEF	Mark Henderson	WASH Chief	mhenderson@unicef.org
UNICEF	Alfonso Alvestegui	Small Towns Programme manager	aalvestegui@unicef.org
UNICEF	Maysa Tricamegy	Water supply small towns officer	mtricamegy@unicef.org
UNICEF	Alberto Cumbane	Procurement specialist	acumbane@unicef.org
UNICEF	Matteus van der Velden	M&E specialist	mvandervelden@unicef.org
UNICEF	Emine Isciel	WASH officer	eisciel@unicef.org
AIAS	Ms Olinda Sousa	Executive Director	occsousa@hotmail.com
AIAS	Laurinda Foliche	AIAS focal point for Provincial Delegations	lfoliche@yahoo.com
AIAS	Elcina Mulambo	Head of Planning & Tariffs Dept	elcina.mulambo@aias.gov.mz; elcina.mulambo@aias.gov.mz
SIPCA	Joao Costa & colleagues	SIPCA Manager	sipcamz.jc@gmail.com
Soares da Costa	Benjamim Guiongo	Project Manager	bguiongo@soaresdacosta.co.mz
CONSULTEC	Carlos Caupers	Project Supervisor	ccaupers@consultec.co.mz
CRA	Mr Alvarinho	President of CRA	malvarinho@cra.org.mz
CRA	Mr Magalhaes	Executive Secretary CRA	magalhaes@cra.org.mz
Dutch Embassy	Felix Hoogveld	Chair of WASH Donor group	felix.hoogveld@minbuza.nl
DNA	Susana Saranga	Water National Director	ssaranga@dnaguas.gov.mz, suzanasaranga@gmail.com
AIAS	Angelo Ramos	Provincial Delegate in Nampula	angeloframos@ymail.com
Water and Sanitation department	Simao Lourenco	DPOPH Head of Department	lourencosimao@yahoo.com.br
CRA Regional Delegation	Jorge Matola	Regional Delegate of Northern Region	
UNICEF	Roberto de Bernardi	Country Representative (Officer in Charge)	rdebernardi@unicef.org
DPOPH Nampula	Mr Bento Mualoja	Director of DPOPH Nampula	bmualoja@gmail.com
WSP Mozambique	Peter Hawkins	Country Coordinator	phawkins@worldbank.org

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INAS	Lourenco Buene	Provincial Director	lbuene@yahoo.com.br
NCD, Nacala Corridor Railway concessionaire.		Director, NCD	

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Consultations during town visits

Town	Rapale	Ribaue	Monapo	Namialo
District Administrator	✓	✓	✓	✓
SDPI	✓			✓
Sanitation working group	✓	✓		
Municipal Council President		✓	✓	
Municipal WASH technician		✓		
PEC team		✓	✓	
Current Water Supply Operator		✓	✓	
Other Authorities (?)				✓
Field visit of town / market area	✓	✓	✓	✓

# Annex E: Phase 1 Output target vs actual

Key Result Areas Headline Indicators	Programme results 2013 (T/M/F)	Cumulative results 2012-Apr 2013	Expected results Phase 1
I-1 Number of additional people with access to safe water	0	0	12,000
I-2 Number of additional people with access to basic sanitation	1,735	1,735	10,000
I-3 Number of additional locations with hand washing facilities and soap	N/A	N/A	2,000
I-4 Number of additional schools with water, sanitation and hand washing facilities	0	0	20
Performance against Strategic Objective 1:			
Access to water			
I-1 Number of additional people with access to safe water	0	0	12,000
Sub I-1: Number of schoolchildren with access to safe drinking water (Monapo, Namialo, Rapale)	15,761 (7,584/7,364)	15,761 (7,584/7,364)	7,000
I-8 Proportion of population in target locations using an improved drinking water source (Baseline survey 2012 in 5 towns)	N/A % figures are not available as the % over the baseline is designed for 5 towns and Phase 1 only addresses the needs of 1 town (Ribaue).	N/A % figures are not available as the % over the baseline is designed for 5 towns and Phase 1 only addresses the needs of 1 town (Ribaue).	46% Target in prog logframe is for province of Nampula (there was no baseline in the towns at time of programme diesign). Baseline for 5 target towns is 47%
Access to sanitation			
I-2 Number of additional people with access to basic sanitation	1,735	1,735	10,000
Sub I-2: Number of additional open defecation free <i>bairros</i> (Baseline survey 2012 in 5 towns)	N/A	N/A	N/A

I-10 Proportion of population in target locations using an improved sanitation facility (Baseline survey 2012 in 5 towns)	N/A % figures are not available as the % over the baseline is designed for 5 towns and Phase 1 only addresses the needs of 1 town (Ribaue).	N/A % figures are not available as the % over the baseline is designed for 5 towns and Phase 1 only addresses the needs of 1 town (Ribaue).	16% Target in prog logframe is for province of Nampula (there was no baseline in the towns at time of programme diesign). Baseline for 5 target towns is 9%
Number of schoolchildren with access to safe sanitation	0	0	20,000
Performance against Strategic Objective 2: Promote good hygiene practices			
I-3 Number of people with improved hygiene practices (modified PAF)	N/A	N/A	10,000
Sub: I-3 Number of additional locations with hand washing facilities and soap	N/A	N/A	N/A
Sub: I-3 Number of people with increased knowledge of hygiene practices	CLTS 9,621 (3,972/5,649) PHAST 7,600 (3,420/4,180) CLTS Children 10,953 (6,716/4237)	CLTS 9,621 (3,972/5,649) PHAST 7,600 (3,420/4,180) CLTS Children 10,953 (6,716/4237)	10,000
I-13 Number of additional people treating drinking water at household level	N/A	N/A	N/A
Number of additional schools with hand washing facilities	0	0	20
Performance against Strategic Objective 3: Support institutional reform and strengthen policy and practice			
I-20 Number of water supply providers (including community management committees) with a sustainable fee structure (this figure refers to borehole with hand pump only)	56	56	
I-22 % of women members of institutions responsible for planning and overseeing operation and management of water supply services	43 % <sup>i</sup>	43%	N/A

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I-23 % women members of institutions responsible for planning and overseeing operation and management of local sanitation services	N/A	N/A	N/A
I-26 Proportion of water supply providers with working ratio >1	N/A	N/A	N/A

2.		
<sup>i</sup> 43%	of the members of water committees in 35 neighbourhoods are women, totalling 300 pe	rsons.